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**Background Information and Technical Support Document
for Amendments to:**

**310 CMR 7.00: Appendix B(7)
“Emission Banking, Trading, and Averaging”**

**Regulatory Authority:
M.G.L. c. 111, Sections 142A through 142E**

February 2008

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057. TDD Service - 1-800-298-2207.

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I. INTRODUCTION

MassDEP is hereby proposing amendments to 310 CMR 7.00: Appendix B(7) *Greenhouse Gas (GHG) Credit Banking and Trading* to specify what greenhouse gas reduction projects will qualify for use under 310 CMR 7.29 should the Department expand the geographic scope of eligible projects beyond the United States or its coastal waters. Specifically, in order to provide increased certainty to affected facilities and offset project¹ developers, MassDEP is proposing, in the event that MassDEP makes a determination to expand the geographic scope beyond the geographic limits of the United States, to allow affected facilities² to use European Union (EU) Emissions Trading Scheme³ (ETS) Phase II allowances,⁴ and certain Clean Development Mechanism Certified Emissions Reductions (CDM CERs)⁵. MassDEP is also proposing related modifications to the Offset Trigger provision that specifies how MassDEP will evaluate it in the future.

II. BACKGROUND

In May 2001, MassDEP promulgated 310 CMR 7.29, *Emission Standards for Power Plants*⁶ to reduce emissions of CO₂, NO_x, SO₂, and Mercury from the six highest emitting electric generating facilities (“affected facilities”). Affected facilities were required to meet annual CO₂ emissions cap standards beginning January 1, 2006, and must meet an annual CO₂ rate standard of 1,800 pounds CO₂ per megawatt hour beginning January 1, 2008.

In October 2006, MassDEP promulgated 310 CMR 7.00: Appendix B(7) *Greenhouse Gas Credit Banking and Trading*,⁷ to allow affected facilities to demonstrate compliance with their CO₂ emissions standards by using GHG Credits created for regional⁸ projects that reduce, avoid, or sequester emissions of GHGs. The 2006 regulations included provisions whereby the geographic scope for projects could be expanded beyond the United States or its coastal waters. Such expansion of the geographic scope could be triggered by certain specified triggers on the basis of price and/or availability of GHG Credits.

On January 18, 2007, Massachusetts Governor Deval Patrick signed the Regional Greenhouse Gas Initiative (RGGI) Memorandum of Understanding (MOU),⁹ committing the Commonwealth to propose a carbon dioxide (CO₂) cap-and-trade program substantially as reflected in the RGGI Model Rule.^{10,11,12} One year later (published on February 5, 2008), MassDEP promulgated regulations to implement that CO₂ cap-and-trade program (the Massachusetts CO₂ Budget Trading Program), and to facilitate the transition from the existing CO₂ emissions standards of 310 CMR 7.29.¹³

¹ Projects that reduce, avoid, or sequester emissions of greenhouse gases.

² The six affected facilities are: Brayton Point, Salem Harbor, Mystic, Canal, Mt. Tom, and Somerset.

³ The European Union Emission Trading Scheme (EU ETS) is a multi-country, multi-sector Greenhouse Gas emission trading scheme.

⁴ Phase II of the EU ETS is the second trading period of the EU ETS, which lasts from 2008-2012.

⁵ The Clean Development Mechanism is a mechanism, created under the Kyoto Protocol, that allows for the creation and use of certified emissions reductions (CERs) for GHG offset projects. These CERs may be used to demonstrate compliance with country-specific emissions targets established by the Kyoto Protocol.

⁶ <http://www.mass.gov/dep/bwp/daqc/files/regs/729final.doc> and <http://www.mass.gov/dep/bwp/daqc/files/regs/finalrtc.doc>

⁷ <http://www.mass.gov/dep/air/laws/ghgapb.doc>, <http://www.mass.gov/dep/air/laws/ghgrtc06.doc> and, <http://www.mass.gov/dep/air/laws/ghgregdd.doc>

⁸ Connecticut, Delaware, Maine, Massachusetts, Maryland, New Hampshire, New Jersey, New York, Vermont, or the coastal waters thereof. (Note that Rhode Island was added to this list via recent amendments to 310 CMR 7.00: Appendix B(7).)

⁹ <http://rggi.org/agreement.htm>

¹⁰ <http://rggi.org>

¹¹ For more information regarding the Model Rule see Section III.A. of this document.

¹² RGGI is an ongoing effort (which commenced in September 2002) by Northeast and Mid-Atlantic States to develop and implement a regional CO₂ cap-and-trade program aimed at stabilizing and then reducing CO₂ emissions from large fossil-fuel-fired electricity generating units in the region.

¹³ <http://www.mass.gov/dep/bwp/daqc/files/regs/finalrsn.doc>

III. DESCRIPTION of the PROPOSED AMENDMENTS related to GEOGRAPHIC EXPANSION

A. Overview

In the event that MassDEP expands the geographic scope beyond the United States or its coastal waters as allowed under 310 CMR 7.00 Appendix B (7)(d)4. and 6., MassDEP is proposing to allow affected facilities to use for compliance with the CO₂ emissions standards of 310 CMR 7.29:

- European Union (EU) Emission Trading Scheme (ETS) Phase II allowances; and,
- Clean Development Mechanism (CDM) Certified Emissions Reductions (CERs), provided that they are eligible for use under Phase II of the EU ETS.

The EU ETS is an internationally recognized cap-and-trade program that requires real reductions from facilities. Concerns with Phase I have been largely addressed in Phase II. Therefore, MassDEP believes that EU ETS Phase II allowances are acceptable to demonstrate compliance with the CO₂ emissions standards of 310 CMR 7.29 in the event that the geographic scope is expanded beyond the United States or its coastal waters.

The Clean Development Mechanism includes an internationally recognized process for evaluating and certifying greenhouse gas emissions offset projects. Approved Projects are issued CDM CERs, which can be used to comply with emissions limits established under the Kyoto Protocol and, with certain exceptions, the EU ETS. In a process similar to the one employed by MassDEP to evaluate GHG Credit applications, CDM CER projects are evaluated to ensure that emission reductions, avoided emissions, or sequestered emissions are real, additional, verifiable, permanent, and enforceable. Therefore, MassDEP believes that, in the event that the geographic scope is expanded beyond the United States or its coastal waters, certain CDM CERs would be acceptable to demonstrate compliance with the CO₂ emissions standards of 310 CMR 7.29, subject to the limitations described in the section below.

MassDEP notes that allowing international projects that have been approved under the Clean Development Mechanism is consistent with 310 CMR 7.70, the *Massachusetts CO₂ Budget Trading Program*, which, after a stage two trigger event,¹⁴ allows for the use of “certified greenhouse gas emissions reduction credits issued pursuant to the United Nations Framework Convention on Climate Change (UNFCCC) or protocols adopted through the UNFCCC process.” MassDEP also notes that recently proposed federal programs include provisions to allow for the use of CDM CERs.

B. Limitations

MassDEP is proposing to restrict the use of CDM CERs to only those that are usable under Phase II of the EU ETS at the time of application (e.g., CDM CERs created for large hydropower will not be eligible). The EU ETS has been actively evaluating different categories of CDM CERs, and how to ensure that they are indeed real, enforceable, verifiable, and additional, for several years. MassDEP believes that the EU ETS is making progress on addressing these issues, and does not believe that it would be appropriate to allow affected facilities to use any CDM CERs that are not usable under Phase II of the EU ETS at the time of application. MassDEP is also proposing not to allow the use of Emission Reduction Units (ERUs) created under the Joint Implementation (JI) mechanism of the Kyoto Protocol because the mechanism has thus far not been widely used, and evaluating the appropriateness of using JI ERUs in this program is therefore not possible at this time. Furthermore, MassDEP understands that as a practical matter, JI ERUs are not generally available.

To remain consistent with the existing regulations, CDM CERs created for project categories that are ineligible under 310 CMR 7.00: Appendix B(7) cannot be used for compliance with 310 CMR 7.29. Therefore, CDM CERs created for projects explicitly excluded from the award of GHG Credits pursuant to 310 CMR 7.00: Appendix B(7)(d)2. are

¹⁴ A stage two trigger event is “the occurrence of any twelve month period that completely transpires following the market settling period and is characterized by an average CO₂ allowance price that is equal to or greater than the stage two threshold price,” as defined in 310 CMR 7.70(1)(b). The stage two trigger price is set at \$10 in 2005 dollars, and will be annually increased by 2% plus the annual percent change in the Consumer Price Index.

not eligible for use. Excluded project categories are nuclear power generation, and under-water and under-ground sequestration. Furthermore, in accordance with 310 CMR 7.00: Appendix B(7), emission reductions, avoided emissions, or sequestered emissions must be permanent. Therefore, CDM CERs that are temporary in nature¹⁵ (i.e., temporary CERs [tCERs] and long-term CERs [lCERs]) are not eligible for use. At this time, this rules out forestry and land use management projects, which are issued only CDM tCERs or lCERs.

Applications for verification shall be at least 20,000 tons CO_{2e}, or 18,144 metric tons CO_{2e}.

C. Process

MassDEP is proposing to allow only the direct use of EU ETS Allowances and CDM CERs by affected facilities for compliance with the CO₂ standards of 310 CMR 7.29. These allowances and credits will not be converted to GHG Credits, and will not be eligible for resale or for conversion to CO₂ allowances under the exchange provisions of 310 CMR 7.00: Appendix B(7)(h).

Before being used for compliance, CDM CERs and EU ETS Phase II Allowances must be cancelled or otherwise terminated to prevent their use in other regulatory (e.g., EU ETS or Kyoto Protocol) or voluntary programs to prevent double counting.¹⁶ Affected facilities must certify the cancellation or termination to facilitate enforcement of MassDEP's prohibition against double counting. In the event that an entity other than the affected facility actually holds and cancels the CDM CERs or EU ETS Phase II Allowances, then that entity and the affected facility must certify to that cancellation or termination.

Before being cancelled and approved for use for compliance under 310 CMR 7.29, CDM CERs and EU ETS Phase II Allowances must be verified. Verification (step one) requires affected facilities to provide information regarding the specific CDM CERs and EU ETS Allowances that they intend to use, including but not limited to:

- The name or type of the allowances or credits and the name of the regulatory scheme and issuing body of the allowances or credits (e.g., CDM CER, EU ETS Allowance);
- The type of project the CDM CER was created for (where applicable);
- The serial numbers of the CDM CERs and EU ETS Phase II Allowances;
- Total tons of carbon dioxide equivalent emissions represented by the allowances or credits;
- Demonstration that the CDM CERs are usable in Phase II of the EU ETS at the time of application for verification;
- Identification of the owner of the allowances and credits;
- Certification by the relevant regulatory body that the allowances and credits have been issued; and,
- The price paid, or to be paid, for such allowances or credits.

MassDEP approval for use (step two) requires that an affected facility and the holder of the CDM CERs or EU ETS Phase II Allowances (if not the affected facility) demonstrate¹⁷ and certify that the CDM CERs or the EU ETS Phase II Allowances were cancelled or otherwise terminated to prevent their use (double counting) for any other regulatory (e.g., EU ETS or Kyoto Protocol) or voluntary purposes. This demonstration shall include but not be limited to:

- Evidence that the allowance or credit was actually purchased;
- A legal document or other written statement issued by the relevant regulatory body that the allowances and credits have been cancelled; and,

¹⁵ TCERs and lCERs are expiring currencies. This means that if they were to be used to satisfy a compliance obligation, the tCER or lCER would need to be replaced after its expiration date.

¹⁶ Specifically, MassDEP is proposing that applications must include "a demonstration and certification that the allowance or credit was cancelled or otherwise terminated in a way that prevents use for any other regulatory or voluntary purposes other than for compliance with 310 CMR 7.29(5)(a)5."

¹⁷ Such demonstration shall include evidence that the CDM CER or the EU ETS Phase II Allowance was actually purchased and actually cancelled, and that they have not and cannot be used for any other regulatory or voluntary program.

- Evidence that the allowance or credit has not and cannot be used for any other regulatory or voluntary program.

Once MassDEP has approved an application to use these allowances or credits to demonstrate compliance with the CO₂ emissions standards of 310 CMR 7.29, they cannot be used for any other purpose.

MassDEP is proposing this two-step process to provide affected facilities with certainty that a given CDM CER or EU ETS Phase II Allowance will be accepted under 310 CMR 7.00: Appendix B(7) before the affected facility is required to cancel it. MassDEP will make a finding regarding the administrative completeness for applications for verification and use of CDM CERs and EU ETS Phase II Allowances within 15 business days of submittal, and will make a consistency determination within 30 days of its finding that an application is administratively complete. MassDEP also proposes to apply the public participation procedures for certification and verification to applications for verification of CDM CERs and EU ETS Allowances. This includes public notice and a 30-day public comment period following publication of the notice, and may include a public hearing.

IV. DESCRIPTION of the PROPOSED AMENDMENTS related to the TRIGGER PROVISIONS

MassDEP recently finalized amendments to 310 CMR 7.00: Appendix B(7) that expanded the geographic scope from the region to the entire United States and its coastal waters. MassDEP is hereby proposing amendments to clarify that it will consider GHG Credits created subsequent to the geographic expansion nationwide for the June 1, 2008 evaluation of the Offset and Trust Triggers.

According to this proposal, if the Offset Trigger is met and the geographic scope is expanded beyond the geographic limits of the United States and the coastal waters thereof, CDM CERs and EU ETS Phase II Allowances may be used to demonstrate compliance with the CO₂ emissions standards of 2007 and 2008.¹⁸ The Offset Trigger on June 1, 2009, is no longer needed because applications for GHG Credits are due by March 31, 2009, and applications for verification of CDM CERs and EU ETS Phase II Allowances are due by March 31, 2009. Therefore, MassDEP proposes to delete the 2009 Offset Trigger evaluation from the regulations.

These proposed amendments retain the Commissioner's Trigger (Circuit Breaker Mechanism), which allows the Commissioner of MassDEP to at any time:¹⁹ expand the geographic scope; allow payments into the GHG Expendable Trust; or, reduce the annual tonnage requirements for certifications of projects. Such actions require that MassDEP provide notice in the Environmental Monitor, and an opportunity for public comment. The Commissioner has used this trigger to allow the affected facilities to make payments into the GHG Expendable Trust. The Trust will remain open until September 1, 2009, the deadline for affected facilities to demonstrate compliance. Therefore, MassDEP will not continue its annual evaluation of whether or not to allow payment into the GHG Expendable Trust, and is proposing amendments to eliminate this requirement from 310 CMR 7.00: Appendix B(7)5.

V. ECONOMIC IMPACTS

The proposed amendments refine the trigger price provisions included in 310 CMR 7.00: Appendix B(7). Those trigger provisions are designed to mitigate compliance costs for facilities that are subject to the CO₂ emissions standard in 310 CMR 7.29 by expanding the geographic scope over which projects may be created, or by allowing affected facilities to demonstrate compliance by paying into the GHG Expendable Trust.

The proposed amendments would impose new requirements on international projects. If the geographic scope is expanded beyond the United States, these new requirements have the potential to exclude some international projects that would have been eligible under the unamended offset trigger price provisions. Relative to what might have been

¹⁸ Note that recent amendments postpone and combine the 2007 and 2008 CO₂ compliance demonstration deadlines under 310 CMR 7.29 (from January 31, 2008 and 2009) to September 1, 2009.

¹⁹ These actions may occur at any time prior to September 1, 2009 (this is also the deadline for facilities to demonstrate compliance with the CO₂ emissions standards of 310 CMR 7.29)

available under the unamended regulations, these changes to the decision criteria and requirements for international projects do have the potential to limit compliance options and could, therefore, increase compliance costs for affected facilities. However, affected facilities and especially offset project developers may benefit financially from the increased certainty provided by these amendments, and administrative costs for MassDEP would also be substantially reduced if the geographic scope is expanded beyond the United States. Ultimately, the economic impacts of these amendments depend on future developments in the domestic GHG Credit market and, if the geographic scope is expanded, international markets.

MassDEP has recently taken other actions that it believes will ensure that costs for complying with the CO₂ emissions standards of 310 CMR 7.29 will not be excessive. Such actions include: expanding the geographic scope for GHG Credit projects to the entire United States or its coastal waters and proposing to allow facilities to pay into the GHG Expendable Trust. Note that in the event that the GHG Expendable Trust is opened, compliance costs will be capped at the Trust Trigger Price, which is \$11.04 for 2008.

VI. REQUESTS for COMMENTS

MassDEP requests comments on MassDEP's proposed amendments to 310 CMR 7.00: Appendix B(7). Specifically, MassDEP requests comment on:

- Whether MassDEP should broaden or further constrain the eligibility of CDM CERs;
- The manner by which MassDEP will evaluate applications for use of EU ETS Phase II allowances and CDM CERs to ensure that these currencies are cancelled or otherwise terminated in a manner that prevents double counting;

In addition, MassDEP notes that it does not intend to modify any other provisions of 310 CMR 7.00: Appendix B(7) as part of this proposal. .

VII. Agricultural Impacts

Pursuant to Massachusetts General Laws, Chapter 30A, Section 18, state agencies must evaluate the impact of proposed programs on agriculture within the Commonwealth.

The proposed amendments revise a CO₂ banking and trading regulation and are not expected to have any negative impacts on agricultural production in Massachusetts.

VIII. Impact on Massachusetts Municipalities

The proposed amendments to the regulation will not negatively impact cities or towns, as none of the six affected facilities are owned by a municipality.

IX. Massachusetts Environmental Policy Act (MEPA)

Pursuant to 301 CMR 11.03(12) (MEPA Regulations), these proposed regulatory amendments will not reduce standards for environmental protection, opportunities for public participation in permitting or other review processes, or public access to information generated or provided in accordance with these regulations. Promulgation of these regulatory amendments, therefore, does not require the filing of an Environmental Notification Form under MEPA.

X. Impacts on Other Programs – Air Toxics

Air toxics are a group of chemical air contaminants that are associated with significant environmental impacts or adverse health effects such as cancer, reproductive effects and birth defects. The federal Clean Air Act requires EPA to promulgate source-specific controls based on Maximum Achievable Control Technologies (MACT) for air toxics.

MassDEP implements MACT standards as EPA promulgates them. In addition, MassDEP controls air toxics through reductions of criteria pollutants and through its Toxics Use Reduction Program. Toxics use reduction is a MassDEP priority. Toxics use reduction is defined as in-plant practices that reduce or eliminate the total mass of contaminants discharged to the environment. The proposed amendments to the regulations will not affect toxics since the amendments provide compliance flexibility while not changing emissions standards.

XI. Public Participation

As provided by state law, MassDEP gives notice and provides the opportunity to review the proposed amendments to 310 7.00: Appendix B, *Emissions Banking, Trading, and Averaging*, the background document, and any technical information, at least 21 days prior to holding a public hearing. Formal notice will be issued 30 days before the public hearings. The hearings will be held in accordance with the procedures of MGL Chapter 30A. A copy of the proposed amendments to 310 CMR 7.29 and 310 CMR 7.00: Appendix B(7) are available on MassDEP's website at: <http://www.mass.gov/dep/>. Copies can also be obtained at MassDEP's headquarters at One Winter Street, Boston, Massachusetts 02108 as well as each MassDEP regional office.

MassDEP requests that written comments be submitted electronically via e-mail to: climate.strategies@state.ma.us. Written comments may also be sent to: Will Space, Department of Environmental Protection, Bureau of Waste Prevention, One Winter Street, Boston, MA 02108.

If there are any questions regarding this document, please contact Nicholas Bianco or Will Space at:

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MassDEP will hold a hearing related to these proposed amendments in Boston on March, 6 2008.